DISA

2004 CUSTOMER PARTNERSHIP CONFERENCE

REALIZING THE NET-CENTRIC VISION

Transforming the Computing Battlefield for Net-Centric OPERATIONS

Col Jim Tschudy
GIG-Combat Support
28 April 2003

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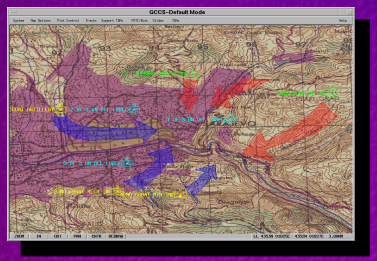
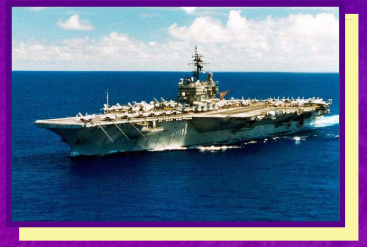
Net-Centric Warfighter Battlefield



Command and control



Provisioning ships

Scheduling maintenance

Managing medical care

Tracking parts
Replenishing supplies

Paying our warfighters

Optimizing transportation

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DISA Computing Battlefield
Most Complicated in the World

- **800,000+ users (MIL, GOV, COM)**
  - Running 1,400 applications
  - Using 18,000 instances of exec software
  - Provided by 180 software vendors
- **At 18 production facilities**
  - CONUS and OCONUS
  - Nearly every type of mainframe and server
    - 50+ mainframes
    - 2,100+ servers
  - Nearly every type of storage device
- **Supporting dozens of development activities**

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How We Got Here

- 1990 – DMRD 924: Service and Agency consolidation
  - Reduced mainframe sites from 194 to 71
- 1993 – DMRD 918/BRAC: DISA Megacenter consolidation
  - Reduced mainframe sites from 71 to 16
- 1998 – DISA “SMART” consolidation under QDR and DRI
  - Reduced of mainframe sites from 16 to 6

The DIVERSITY of 194 SITES

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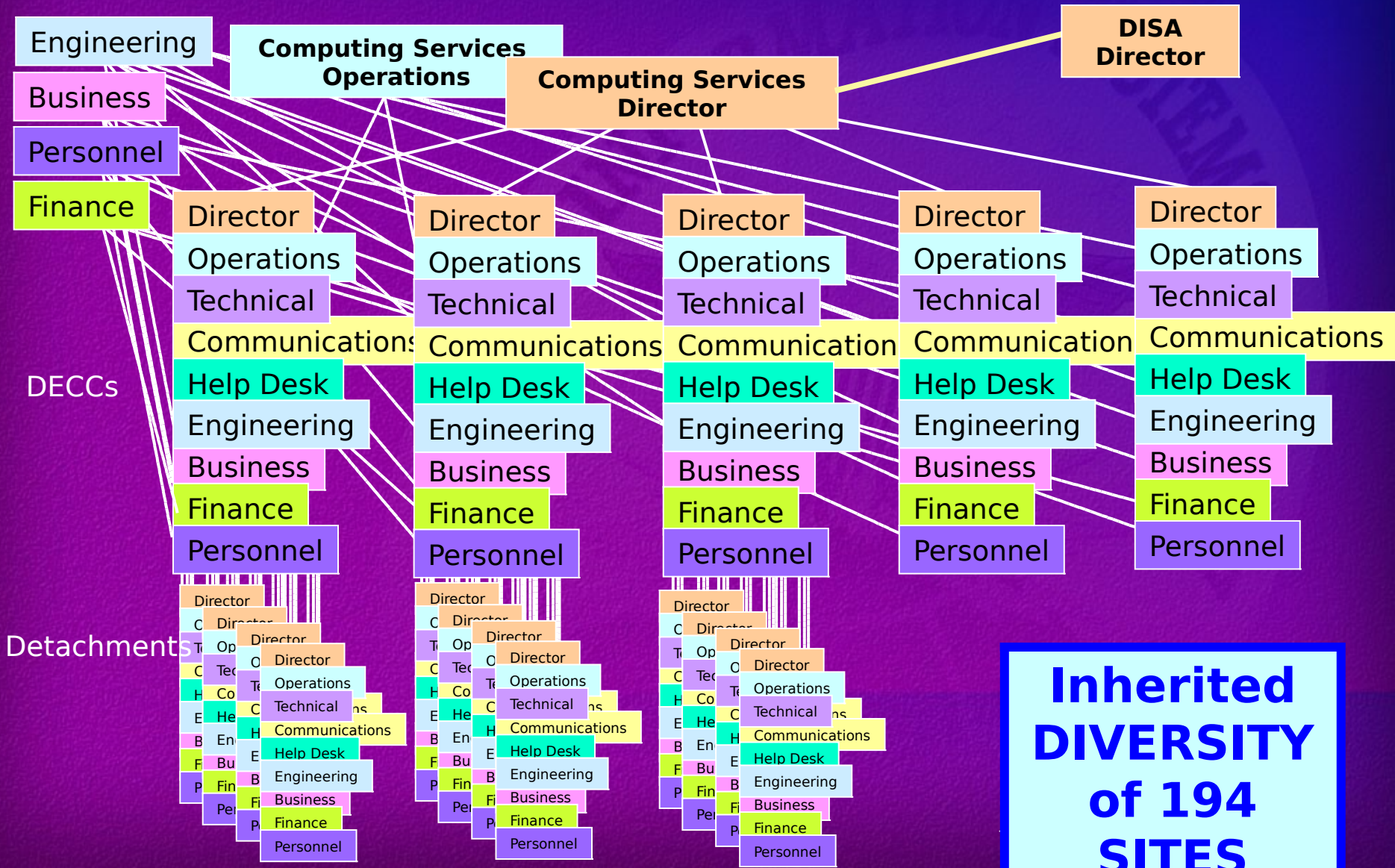
Pre-Transformation

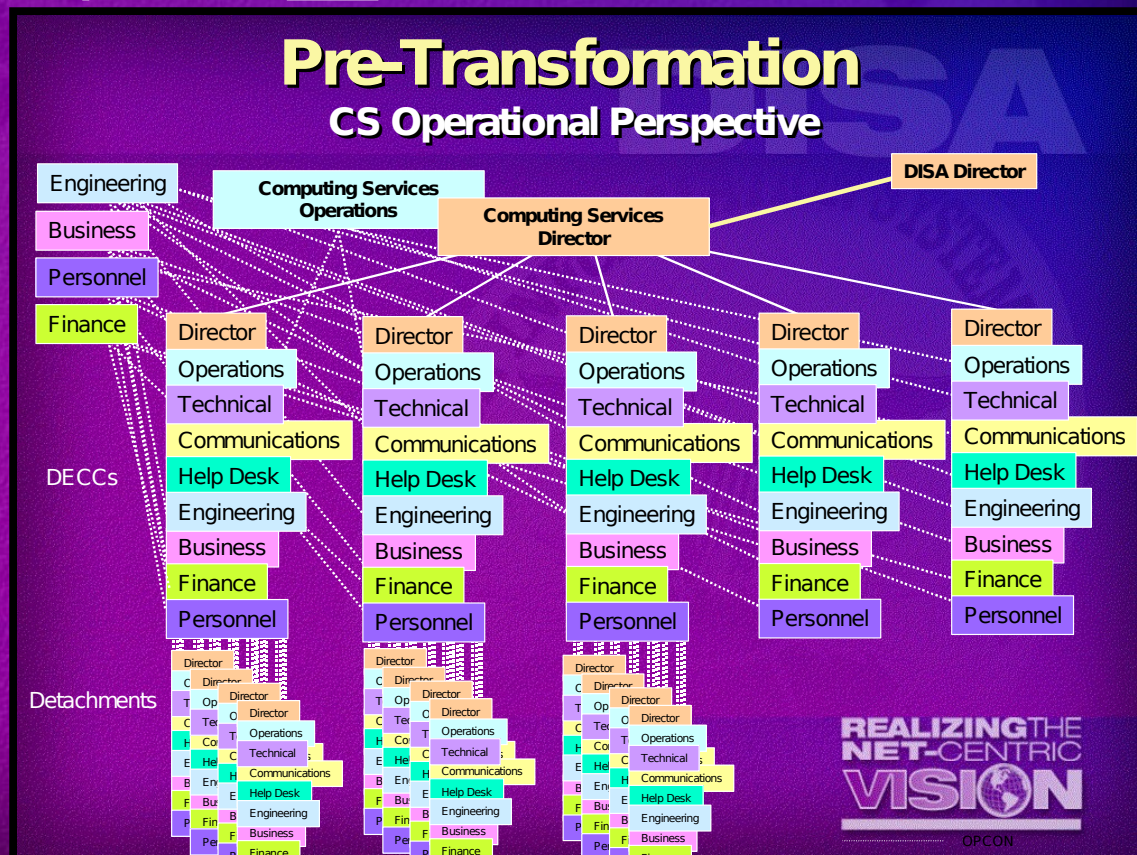
Operational Perspective



Pre-Transformation

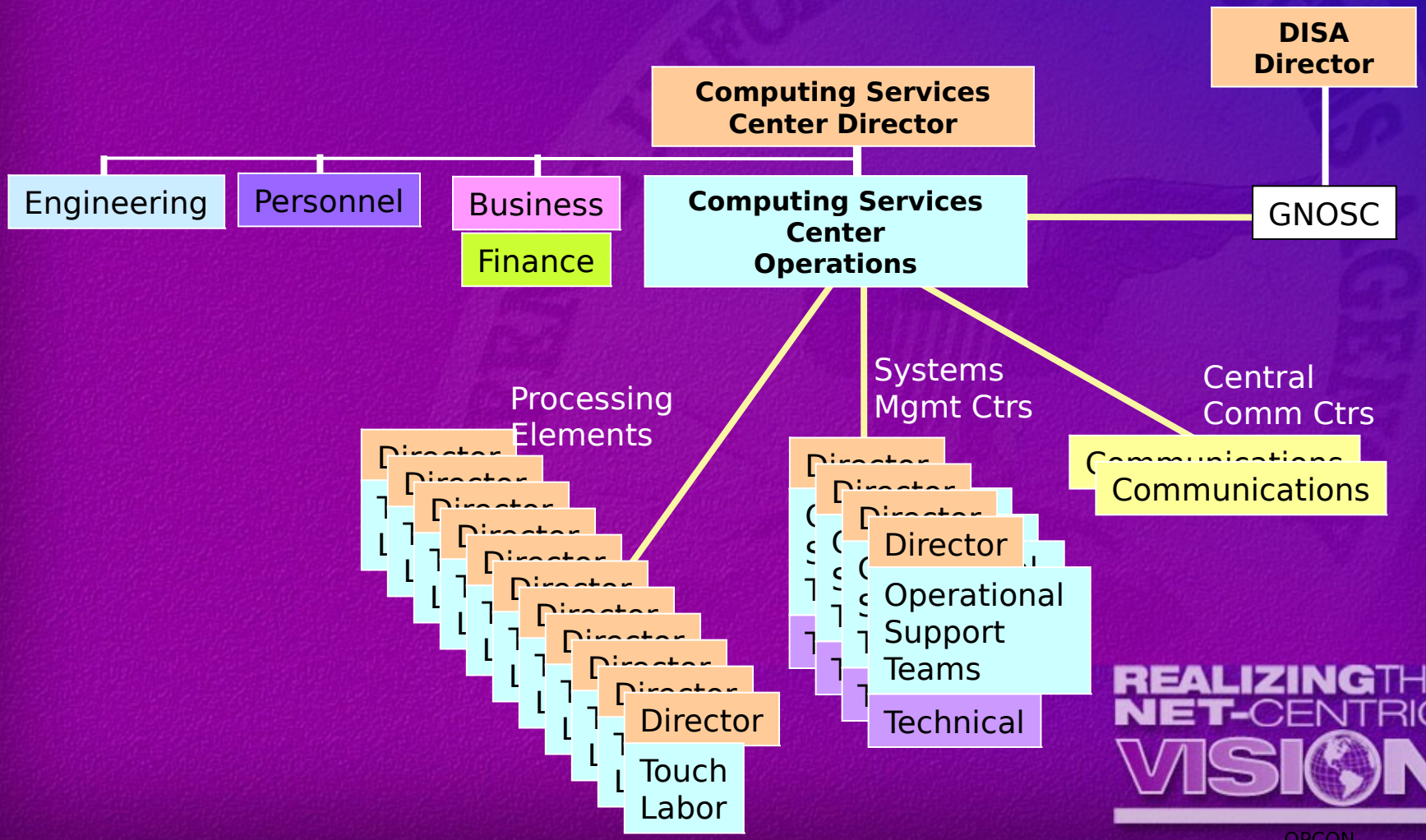
Operational Evaluation

- Decentralized
- Stovepiped
- Franchised



Post-Transformation

Operational Perspective



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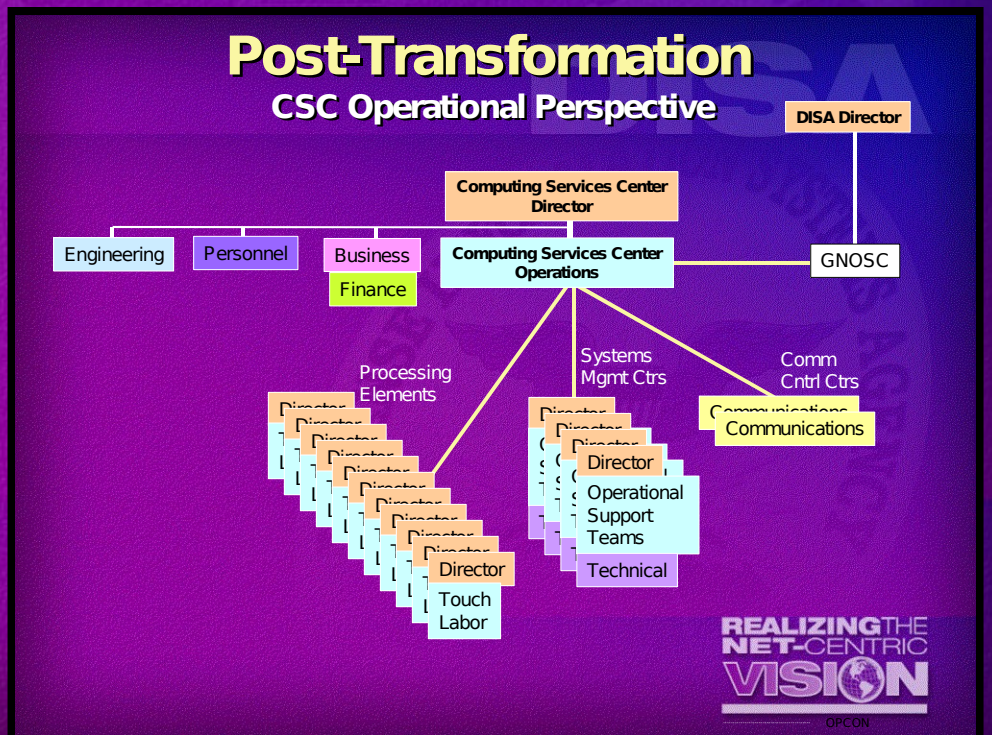
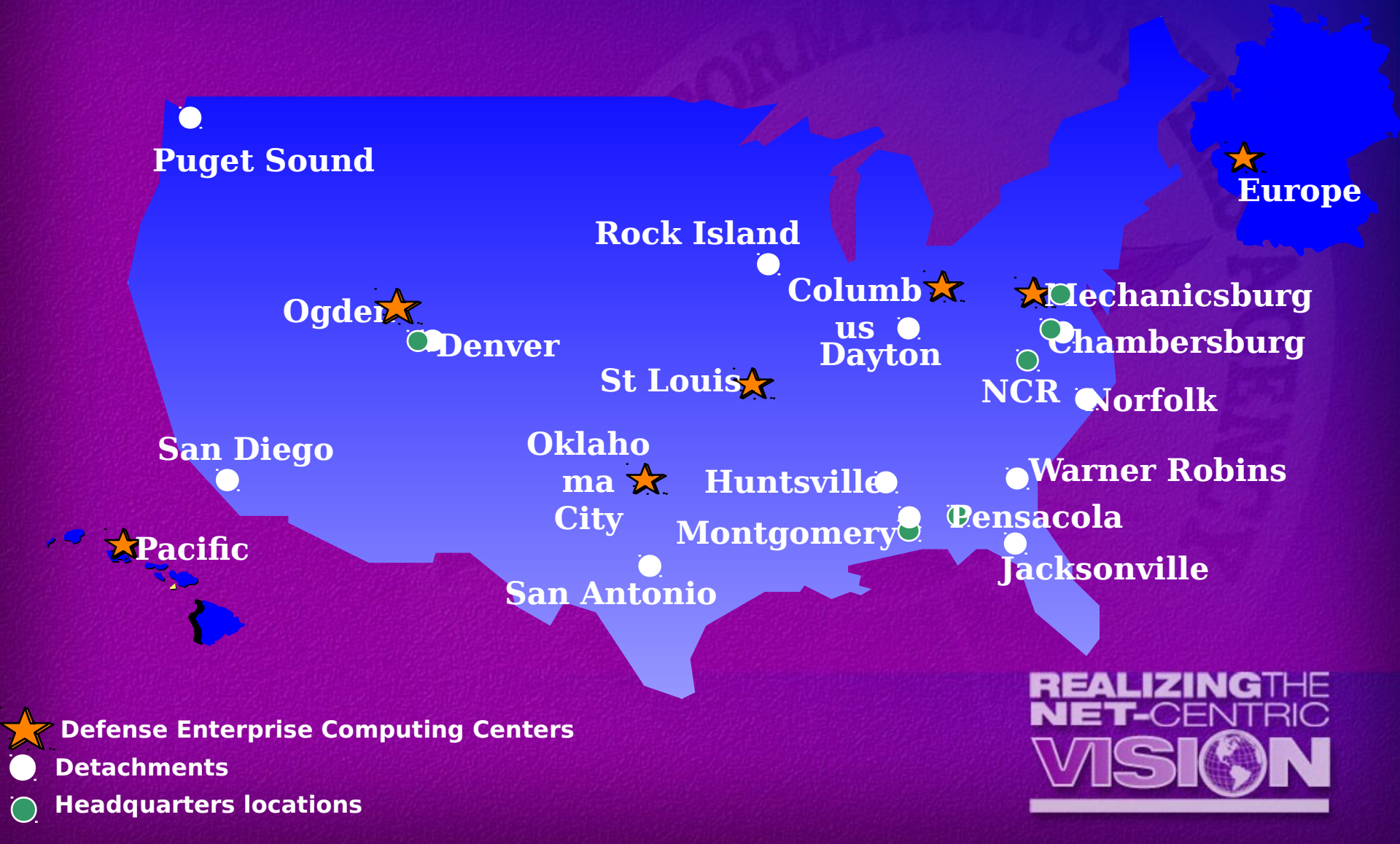
Post-Transformation
Operational Objectives

- **Command and Control Organizational Structure**
- **Postured for Net-Centric Operations**



Pre-Transformation Footprint



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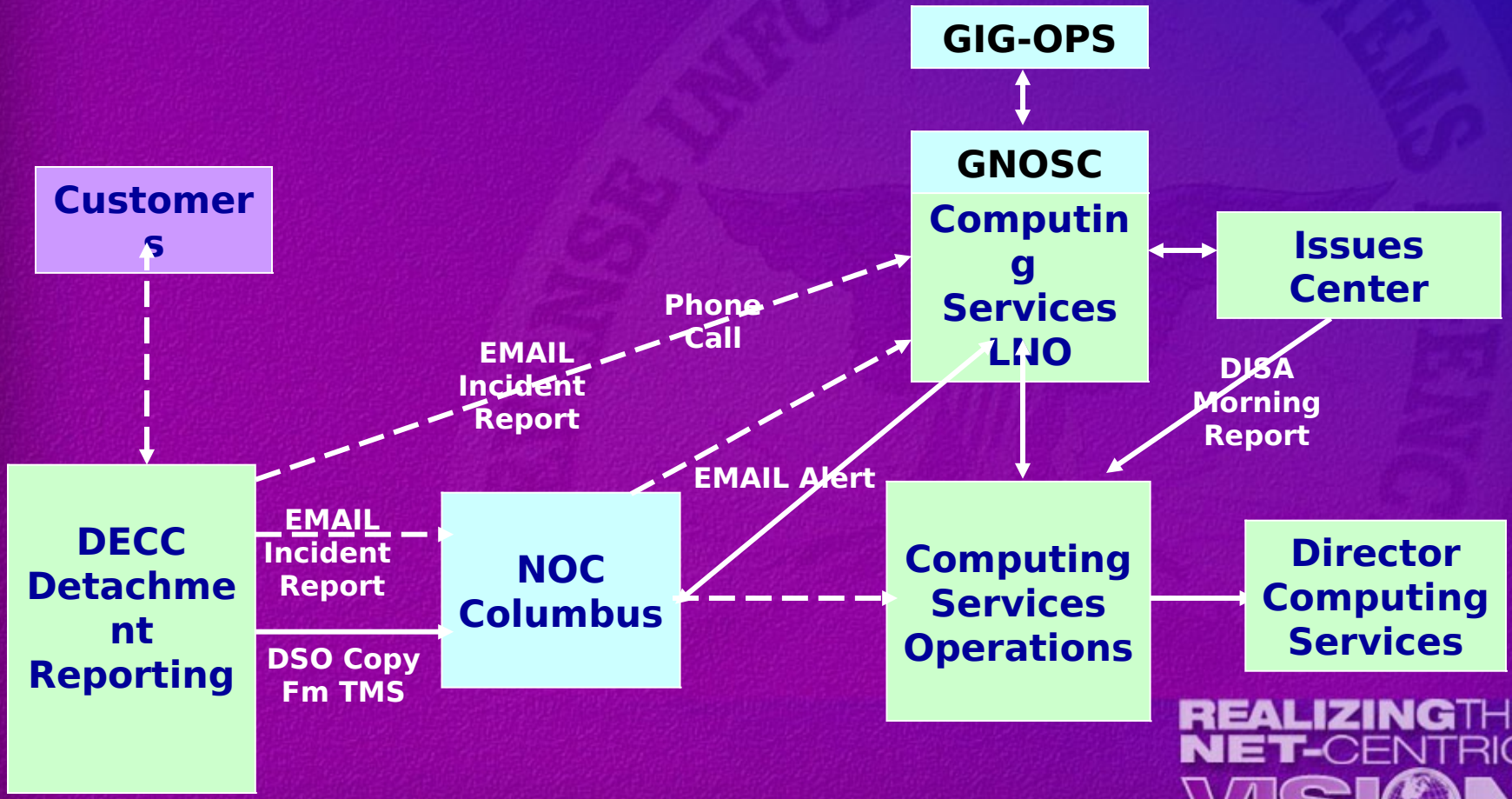
Supporting Ops Focus
Monitor – Direct – Control



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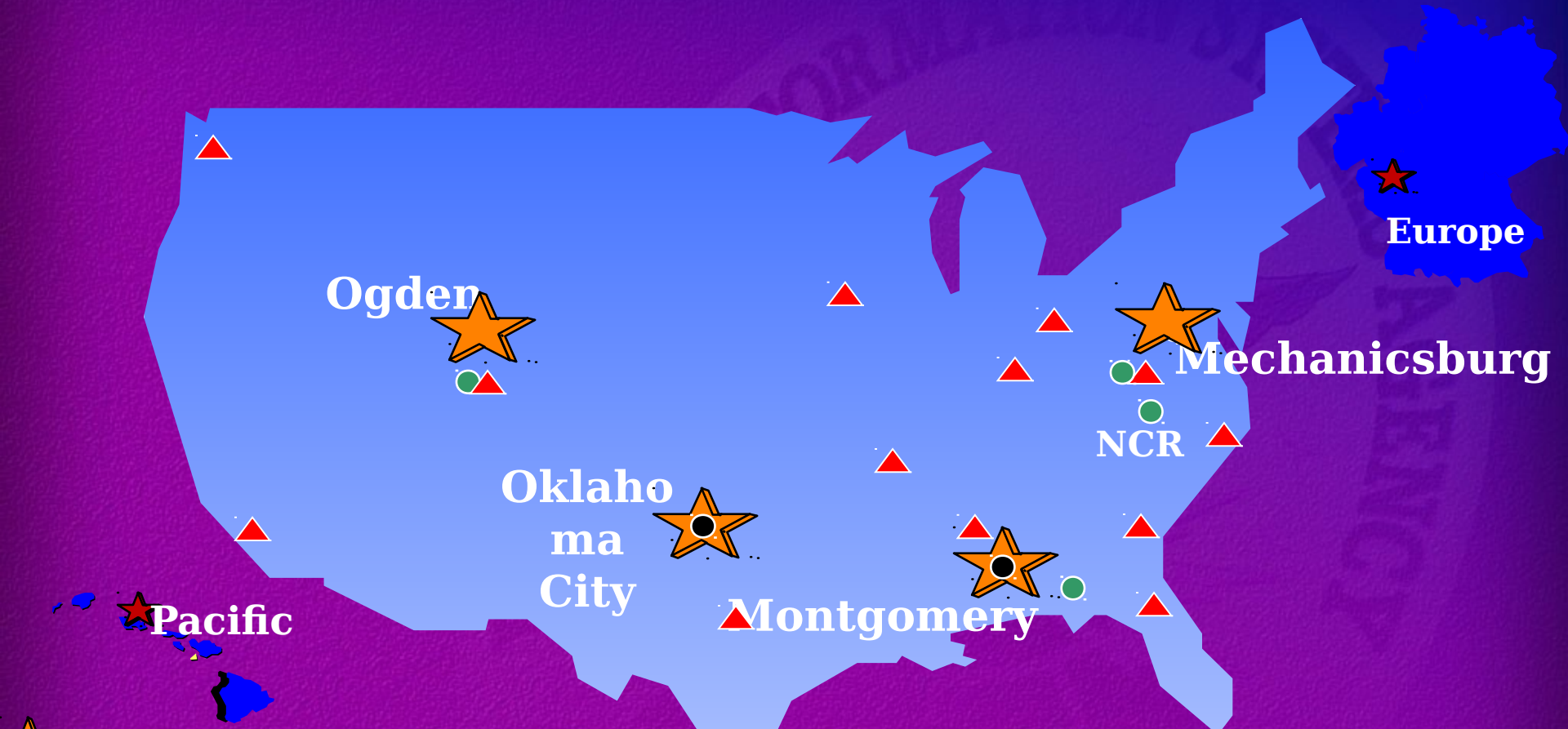
Post-Transformation "Locations"



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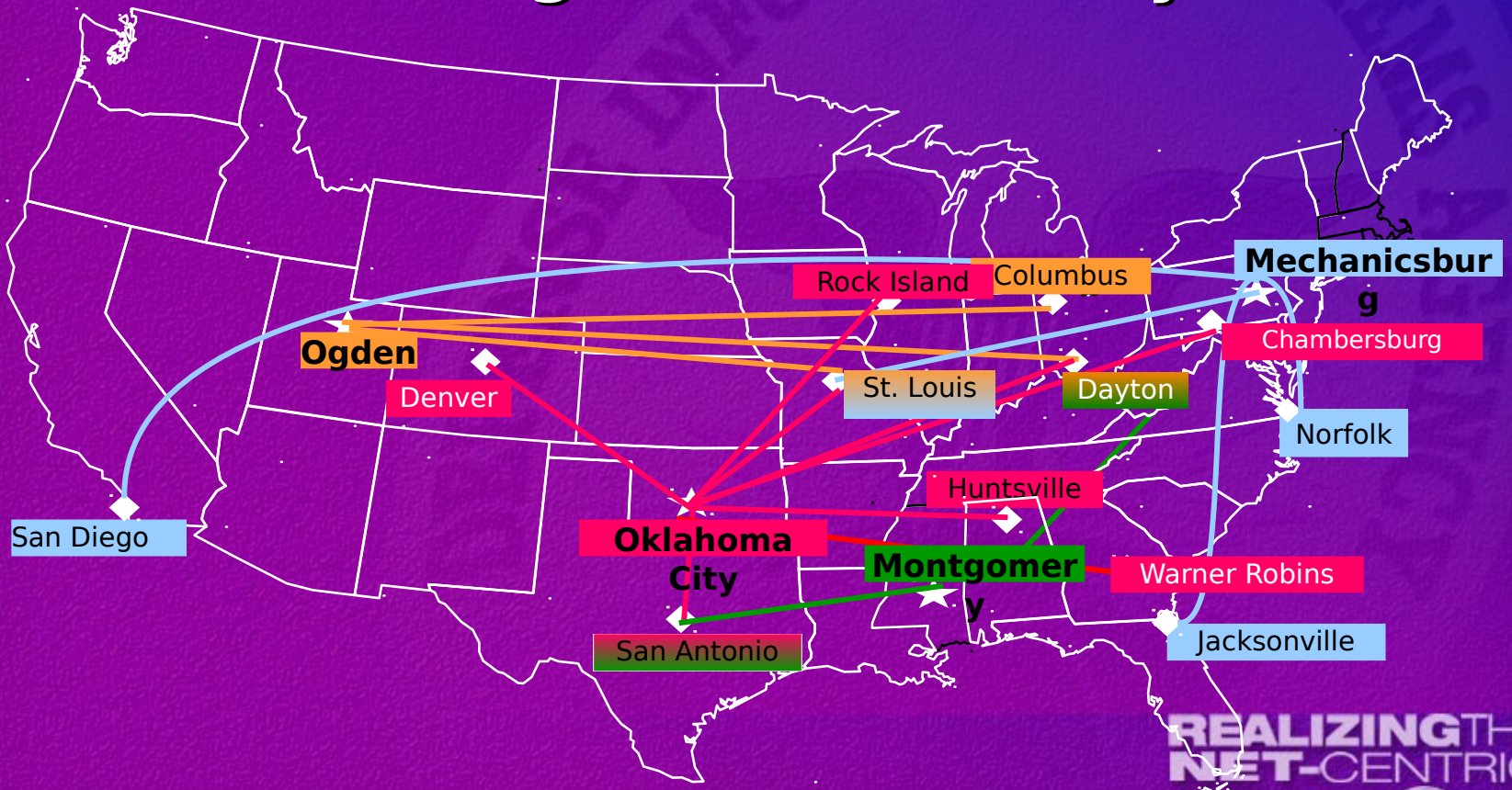
With a Net-Centric "Footprint"

- Geographic location – irrelevant
- Management from anywhere – SOI



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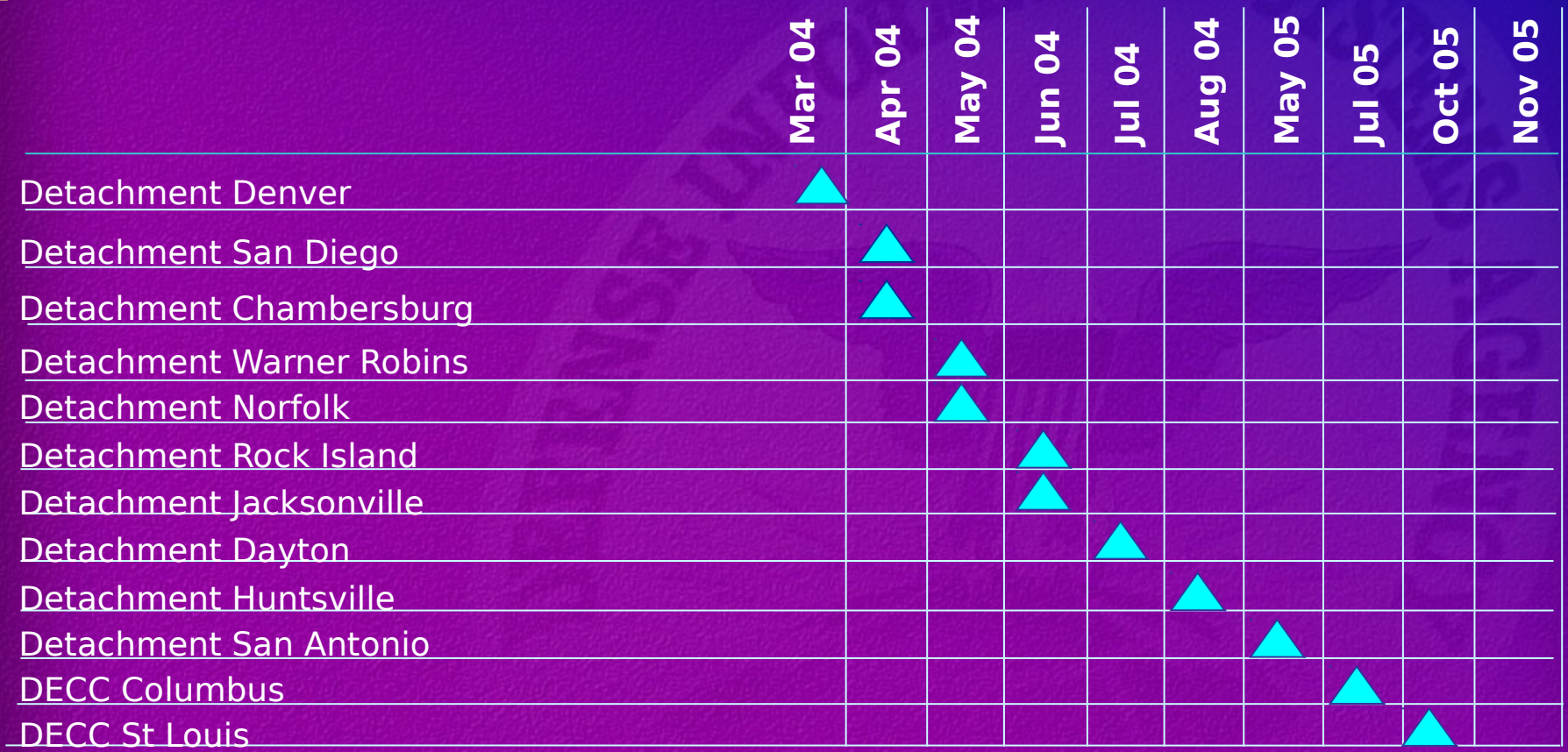
Processing Element Standup Dates



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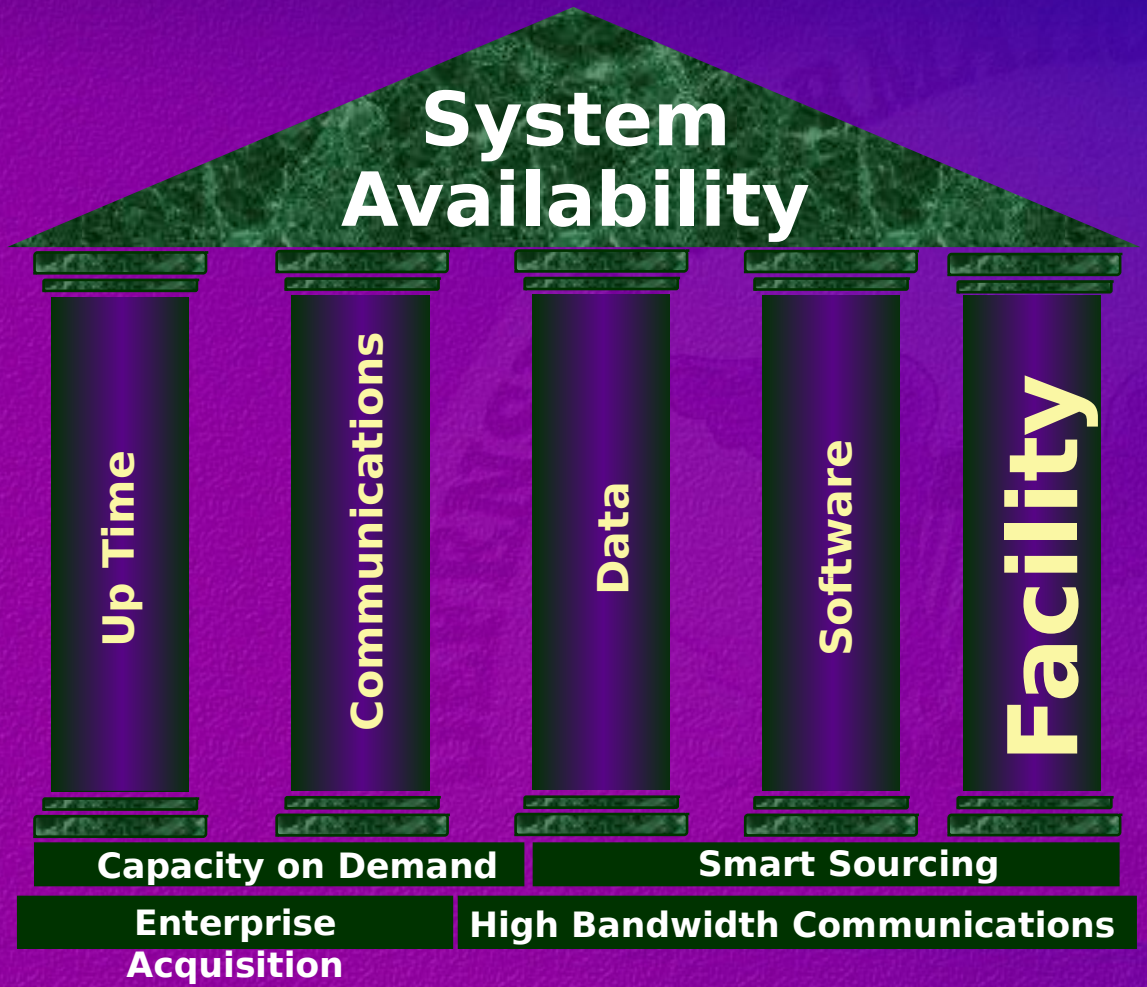
Assured Computing Initiatives



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- Facilities' Systems Redundancy Initiative

Date = Project "start"
"Y" = Proposal Submitted

Green	Redundancy In Place and Operational
Yellow	Some Redundancy Risk

SMC	Chiller Pumps Towers	Computer Room A/C	Controls	Generators	Generator Switchgear	UPS	UPS Switchgear	Main Switchgear	Incoming Power
Mechanicsburg	Jun-04	G	G	G	G	G	G	G	G
Montgomery	G	G	G	G	Jul-04	Jul-04	G	G	G
Ogden	G	Jan-04	G	G	G	G	Y	G	G
Oklahoma City	G	G	G	G	G	G	FY04	G	G
PE									
Chambersburg	G	G	G	G	G	G	G	G	G
Columbus	G	G	G	G	G	G	G	G	G
Dayton	Y	G	G	G	Y	G	G	G	G
Denver	G	G	G	G	G	G	G	G	G
Huntsville	G	G	G	G	G	G	G	G	G
Jacksonville	Y	G	G	Y	Y	Y	G	G	G
Norfolk	Mar-04	G	G	G	G	G	G	G	G
Rock Island	G	G	G	G	G	G	G	G	G
San Antonio	G	G	G	G	Y	Y	G	G	G
San Diego	G	G	G	G	G	G	G	G	G
St. Louis	G	G	G	G	G	G	G	G	G
Warner Robins	G	G	G	G	G	G	G	G	G
O-CONUS									
DECC Europe	G	Aug-04	G	G	G	Aug-04	G	G	G
DECC Pacific	FY04	G	G	G	G	G	G	G	G

- Significant Investment of Resources

Initiatives	Site	Funded
Site Surveys	Multiple	$300,000
Design Cooling Pumps	SMC Oklahoma City	$75,000
Replace Cooling Towers	SMC Oklahoma City	$600,000
Design UPS Modules & Switchgears	SMC Oklahoma City	$350,000
Upgrade UPS Modules & Switchgears	SMC Oklahoma City	$5,200,000
Build Sensitive Compartmented	SMC Mechanicsburg	$2,000,000
Design Chillers, Pumps & Towers	SMC Mechanicsburg	$400,000
Replace Chillers, Pumps & Towers	SMC Mechanicsburg	$4,000,000
Replace (2) Motor Control Centers	SMC Montgomery	$206,000
Replace Input Switchgear	SMC Montgomery	$1,500,000
Replace UPS Modules	SMC Montgomery	$4,000,000
Replace Chillers & Pumps	DECC Pacific	$2,000,000
Replace Computer Room A/C	SMC Ogden	$1,300,000
Upgrade Cooling & Power	DECC Europe	$353,870
Roof maintenance	TBD	TBD
TOTAL (FY03-FY04)		**$22,284,870**

$22M

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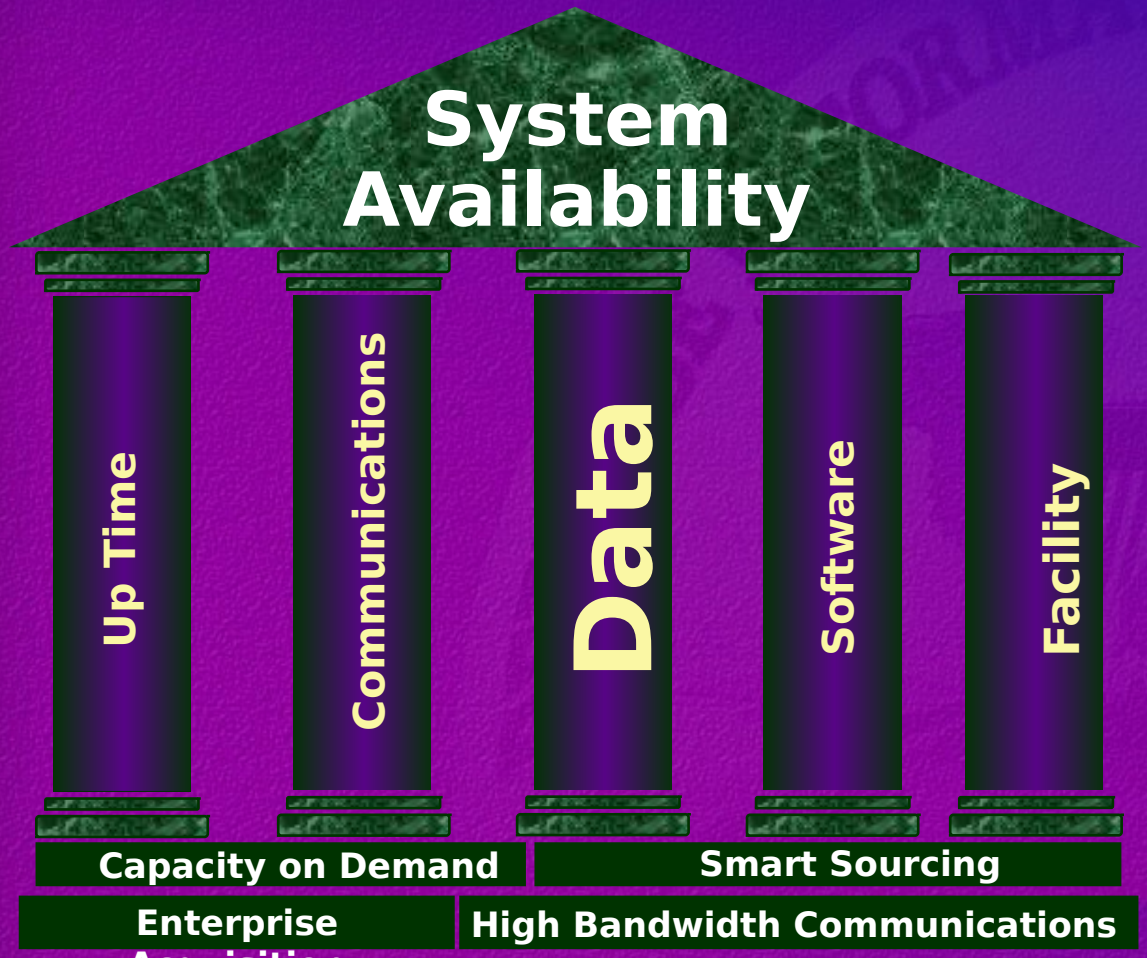
Assured Computing Initiatives



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- Data and OS Replication Initiatives

- For Unisys
  - Total replication between DECC Ogden and DECC Oklahoma City – operational Dec 2001
- For OS 390 (IBM-based)
  - Challenging because of diversity, complexity
  - Replication by application to be done in conjunction with current transformation
  - Data replication in place this fall
  - FOC: September 2005
- For servers
  - Handle on a case by case basis

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Operations Initiatives In Process

- Central Communications Centers (CCC) for remote network operations and failover
- Operational Support Team (OST) optimization
- Automated capacity and performance monitoring tools on “all” platforms
- Standard Configuration Management process
- Knowledge capture and documentation in KM tools

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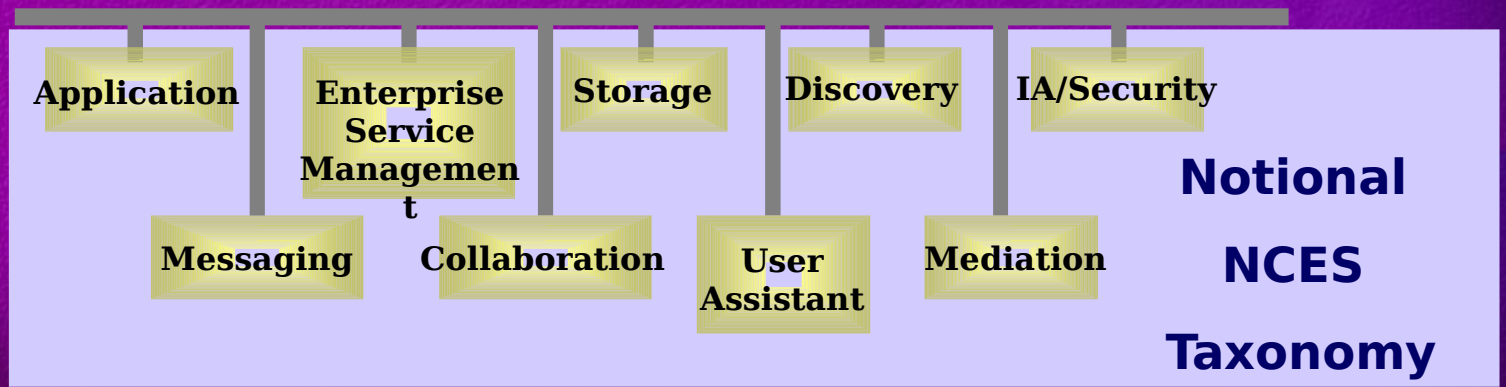
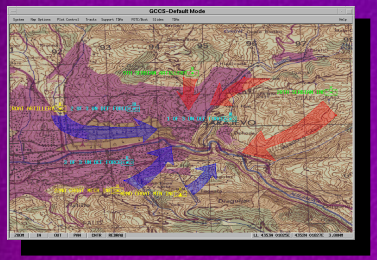
Transformed Operations Supporting NCES

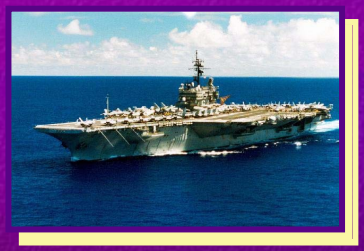
- Commoditization and virtualization
  - Establishment of the “Virtual Data Center”
  - Management of any application (or network or service) on any platform from any location
- Enterprise-wide security monitoring
- Assured computing
  - Capacity on demand : Data replication : 24x7 Facilities



DISA's Net-Centric Warfighter Battlefield



- Information to the edge…
- With scalable, secure, and responsive support…
- Using virtual processing centers…
- Under DOD NETOPS



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